



PCB CAULKING REMEDIATION PLAN

CITY SQUARE DEMOLITION AND ENABLING

FORMER WORCESTER COMMON OUTLET

MALL

WORCESTER, MA

Prepared by

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Revised January 10, 2011



TABLE OF CONTENTS

1.0	SUMMARY	4
2.0	REGULATIONS, PERMITS AND QUALIFICATIONS	4
2.1	FIRE SAFETY AND EMERGENCY EVACUATION PLANS	5
2.2	STANDARD OPERATING PROCEDURES	5
2.3	TRAINING AND CERTIFICATION	7
3.0	SCOPE AND SCHEDULE	7
3.1	SCOPE	7
3.2	WORK SEQUENCE	7
3.3	SPECIFIC WORK PROCEDURES	8
3.4	SCHEDULE	10
4.0	UTILITIES	10
4.1	WATER SYSTEMS	10
4.2	ELECTRICAL SYSTEMS	11
4.3	EXISTING FACILITIES	11
5.0	SITE PREPARATIONS	11
5.1	SITE PROTECTION	11
5.2	SITE ISOLATION	12
5.3	WASTE CONTAINERS	12
6.0	MATERIAL STORAGE AND HANDLING PROCEDURES	12
6.1	PCB BULK PRODUCT WASTE MATERIALS	12



6.2	PCB REMEDIATION WASTE	13
7.0	DISPOSAL	13
8.0	DECONTAMINATION PROCEDURES	14
9.0	HEALTH AND SAFETY	15
9.1	ABSOLUTE HEALTH AND SAFETY PLAN	15
9.2	OSHA REGULATIONS	15
9.3	PUBLIC SAFETY	16
10.0	FINAL APPROVAL AND ACCEPTANCE	16

LIST OF APPENICIES

APPENDIX A	CERTIFICATION LETTER
APPENDIX B	WORKER TRAINING DOCUMENTATION
APPENDIX C	SIMPLE GREEN INFORMATION
APPENDIX D	CAULKING CONTAINMENT LAYOUT



1.0 SUMMARY

This work plan is submitted for the removal and disposal of PCB caulking in joints that include expansion joints, cracks, lines, and any other breaks in the garage floor and walls located at the garage of the Former Worcester Common Outlet located in Worcester, MA. A total estimated quantity of 90,000 linear feet is anticipated to be removed which is separated into three areas. The North Area contains an estimated amount of 8,184 LF, the Center Core Area contains an estimated amount of 33,759 LF and the South Area contains an estimated amount of 48,057 LF. This plan does not include removal of caulk from the roof level of the garage as this caulk did not contain PCB's. PCB caulking will be removed and adjacent surfaces decontaminated within regulated work areas. The adjacent concrete has been determined by the Owner's Consultant to not be contaminated; therefore no removal of the concrete is required. The scope of PCB caulking removal is defined in the specifications as well as this work plan.

Method of removal shall involve various types including caulking cutters and saw cutters. The methods are further discussed in 3.1. *NOTE: THERE WILL BE NO PILOT TESTING. ONLY USED METHODS ARE DESCRIBED IN 2.1*

2.0 REGULATIONS, PERMITS, AND QUALIFICATIONS

NASDI, LLC/YES shall obtain all permits necessary to execute work conducted at the Former Worcester Common Outlet located in Worcester, MA. NASDI, LLC/YES shall adhere to all applicable federal, state, and local rules and regulations including, but not limited to, those from the EPA (related to Contractor Work Plan), the Massachusetts Department of Environmental Protection, the U.S. Occupational Safety and Health Administration (OSHA), and the Worcester Fire Department.

NASDI, LLC/YES shall also conform to all stipulations and permits identified in the contract bid documents, including any conditions set forth in the EPA approval. Where a conflict arises between regulations, NASDI, LLC/YES shall adhere to the most stringent regulation.



NASDI, LLC/YES shall also confer with Consigli and URS to resolve any conflict between the project plans and the remediation procedures.

2.1 FIRE SAFETY AND EMERGENCY ACTION PLANS

NASDI, LLC/YES has prepared an emergency action and fire prevention plans that are fully compliant with all applicable regulations. This plan includes:

- Emergency escape procedures and routes;
- The procedure for announcing emergencies;
- The procedures to account for all employees after evacuation;
- The rescue and medical duties of personnel;
- A list of all major workplace fire hazards;
- The names and/or job titles of people responsible for the maintenance of the fire prevention equipment;
- The names and/or job titles of people to be contacted for information about the job.

2.2 STANDARD OPERATING PROCEDURES

NASDI, LLC/YES has prepared a written work plan and health and safety plan for abatement work to be performed at the Former Worcester Common Outlet located in Worcester, MA. The purpose of the plan is to ensure maximum protection of workers and visitors from PCB exposure, and to minimize/prevent the release of PCBs or PCB-laden dust into the environment. The procedures include, but are not limited to the following:

- Engineering controls and work practices to minimize airborne contamination in the work area, and to prevent the spread of such contamination outside the work area.



These controls and practices instituted during abatement activities are designed to keep workers' exposures to PCBs below the permissible exposure limit and ensure no release of PCBs from the work area.

- Specifications regarding containment processes to prevent the release of abatement debris from the work area.
- Specifications for sufficient and proper personal protective equipment (PPE) and respiratory protection equipment for entrance into the work space from the outside, as may be required by OSHA regulations.
- Specifications for safe work practices in the workplace and exclusion of eating, drinking, smoking, or in any way breaking the respiratory protection.
- Removal methods that minimize the amount of airborne dust generated from abatement activities.
- Specifications regarding end of work shift cleaning procedures.
- Specifications regarding the handling, storage, transport, and disposal of all appropriately classified PCB waste in a manner that minimizes exposure and that complies with federal, state, and local regulations regarding PCBs.
- Specifications identifying disposal sites for PCB waste.
- Specifications regarding contingency plans pertaining to accidental spills and/or contamination in the work area or outside the work area.
- Mandatory and proper use of decontamination facilities when exiting the work area.
- Directions regarding the cleaning of work areas following abatement procedures.
- Supervision of work by a competent person.

In addition, the specific procedures outlined in the Section 3.3 shall be followed.



2.3 TRAINING AND CERTIFICATION

All personnel performing abatement activities at the Former Worcester Common Outlet located in Worcester, MA will have all the required training, medical examinations, and respirator fit testing as specified by OSHA. NASDI, LLC/YES will have a competent supervisor/foreman at the job site at all times overseeing the work. Site-specific hazards and hazards associated with the handling and disposal of PCB products will be effectively communicated to the staff to minimize potential exposures. In addition, NASDI, LLC/YES will provide proper training and equipment for all safety-related issues. Appendix B contains copies of certifications.

3.0 SCOPE AND SCHEDULE

3.1 SCOPE

The scope of work for the abatement project solely addresses specified PCB caulking removal and decontamination of adjacent surfaces, as defined in the specification and this work plan.

3.2 WORK SEQUENCE

The work sequence consists of the following general elements:

- Construction of personal decontamination facilities, as required. Work areas will generally be demarcated by barrier tape with attached PCB Hazard signage and 10 mil reinforced polyethylene drop cloths.
- Temporary PCB bulk product waste storage.



- Following establishment of work areas, NASDI, LLC/YES will begin systematic removal of the joints (generally working from the top to the bottom of the building). NASDI, LLC/YES will use caulking cutters/saw cutting for removal, which will be lightly misted with wetting agent (50% polyoxyethylene and 50%polyoxyethylene ether, one ounce per 5 gallons of water) to minimize dust generated by the removal activities. Once caulking is all removed, adjacent concrete will be wiped down with Simply Green solution.
- Following decontamination of the concrete, NASDI, LLC/YES will request visual inspection by Consigli and certification of remediation will be based on visual clearance followed by concrete samples collected by URS.
- Following receipt of certification of remediation, NASDI, LLC/YES will remove the barrier tape, poly and signage within the work areas.
- NASDI, LLC/YES will package and label all PCB caulking for disposal of as PCB-containing waste.

NASDI, LLC/YES will supply all labor, materials, and equipment necessary to carry out the scope of work detailed in this document in a professional manner.

3.3 SPECIFIC WORK PLAN PROCEDURES

Prior to beginning the task of caulk removal, NASDI, LLC/YES will select strategic areas of the garage and create appropriate removal, decontamination, and storage zones in accordance with applicable guidelines and the Project Specification. The work areas will be taped off and proper signage will be installed to keep other workers/visitors out. Poly sheeting & pop-up decons will be used to create decontamination zones as needed to perform the work. It is anticipated that multiple areas may be going at the same time which will require that pop-up decontamination facilities be present in multiple areas. Work area isolation and protection will consist of by barrier tape with attached PCB Hazard signage and 10 mil reinforced polyethylene drop cloths.



The following is a breakdown of the various options that will be used to perform the work the safest as well as most economical for the Owner, workers and public. Following establishment of removal work areas the following options will be utilize:

Option 1: Caulking Cutters

Caulking cutters; that work electrically; will vibrate the caulking material from the joints. This work is very labor intensive and requires workers to be on hands and knees. Slight misting of work will be performed to assist in controlling dust but minimizing water use.

Once all caulking is removed rags with Simple Green shall be used to wipe concrete surface to prepare for visual inspection.

Option 2: Saw Cutting

Saw cutting of concrete shall be used based on type of material (i.e. expansion joints) and will take place a few inches off of material and if possible at an angle to allow for ease of removal of caulking with some of concrete.

Once all caulking is removed rags with Simple Green shall be used to wipe concrete surface to prepare for visual inspection. In the event of a failing confirmatory test, under authorization from the owner and the direction of the onsite URS representative, NASDI will perform additional concrete cutting beyond the original removal limits. Scarification methods will not be used.

It should be noted that both methods noted above shall be used in various areas.

All disposable products used in the removal procedures, including rags, poly sheeting, cleaning supplies, and vacuum bags will be handled as PCB contaminated waste and disposed of in a TSCA permitted facility. All PCB waste (bulk product and caulking remediation waste) will be packaged daily in DOT authorized drums, labeled, segregated, and stored on-site at the same location as the remediation waste. The storage location is located in the south parking lot adjacent to the church as mentioned in the PCB paint remediation plan. All equipment utilized throughout the duration of this project will be decontaminated in accordance with the project specification and application TSCA regulations. Field equipment, including PPE, will be decontaminated or disposed of with other PCB waste shall be in accordance with 40 CFR 761.79(c)(2). Generally, PPE and other disposable items will be managed as PCB waste; movable items will be decontaminated using Simple Green. Since only the items that have contacted PCB surfaces will require decontamination, wiping with simple green soaked rag is expected to be sufficient. No liquid decontamination waste is expected to be generated. Rags will be disposed of with other PCB waste. Record keeping shall be in accordance with current regulatory standards.

3.4 SCHEDULE

PCB removal work is anticipated to take place during daytime hours beginning once the plan is approved, and it is anticipated that the work will take a total of approximately 14-16 weeks to complete.

4.0 UTILITIES

NASDI, LLC/YES will tie into existing electrical power on-site for the remediation work. Temporary water will be provided on-site consistent with the contract documents. NASDI, LLC/YES will distribute all needed water for abatement and cleaning activities.



4.1 WATER SYSTEMS

All water systems running through the work area and not being used must be shut off at the source. For any system that must be left on, the location of a shut-off valve must be clearly marked on the emergency plan. Water systems used by the contractor should be consistent with Owners' requirements for the work activity.

4.2 ELECTRICAL SYSTEMS

Any electrical systems that may pose a hazard during the abatement process will be shut down by Owner. The power must be locked out at the control panel, and those individuals that have the ability to reenergize the area must be in close contact with the contractor and the remediation staff. Ground-fault circuit interrupters must be used for all temporary power supplies and extension cords

4.3 EXISTING FACILITIES

NASDI, LLC/YES will coordinate with Consigli & URS with regard to maintaining existing facilities for the planned work activities. The Center Core of the garage is scheduled to remain and shall be maintained.

5.0 SITE PREPARATIONS

5.1 SITE PROTECTION

In order to contain debris and to protect existing facilities and the environment during remediation of caulking, NASDI, LLC/YES shall create regulated areas for all remediation work.



The regulated area, used in conjunction with the planned work methods shall serve to prevent dust and debris from the removal and surface cleaning operations from contaminating adjacent areas.

At the end of every work shift, NASDI, LLC/YES shall remove all visible debris from poly ground cover by HEPA-filtered vacuuming. If tears or rips occur in the poly ground cover, the poly may be repaired with duct tape, or removed and replaced with a new sheet, as warranted by the extent of the damage. The materials used to construct regulated areas will be disposed as remediation waste.

5.2 SITE ISOLATION

During the abatement work, NASDI, LLC/YES will address security and access concerns as part of the project. NASDI, LLC/YES will employ dust control measures for all work. The Work Plan specifics in 3.3 address isolation of work areas.

5.3 WASTE CONTAINERS

NASDI, LLC/YES shall obtain and locate the approved PCB waste containers on-site, in locations acceptable to the Owner and Consigli. The PCB waste containers (bulk product & remediation waste) shall consist of DOT approved drums and shall be clearly marked in accordance with state and federal regulations, to avoid confusion with ordinary waste containers.



6.0 MATERIAL STORAGE AND HANDLING PROCEDURES

6.1 PCB BULK PRODUCT WASTE MATERIAL

PCB bulk product waste (e.g., joint caulking) shall be handled in a manner that prevents the breakdown of these materials into fine dust or powders. These materials shall be removed whole, with minimal breakage whenever feasible.

Once removed, these materials shall be placed in the DOT approved drums by end of the shift. PCB waste and PCB-containing items shall be stored for disposal in accordance with 40 CFR 761.40 and 40 CFR 761.65. Containers shall be clearly marked as PCB-containing waste materials.

DOT approved drums will be marked with designations indicating that the PCB materials are contained therein, as stated in 40 CFR 761.65(c)(1). All PCB-contaminated materials disposed of will be non-liquid materials. In addition, poly sheeting shall be used to prevent spillage onto the floor of the storage area. When not in use, drums will remain covered by lids. All areas containing PCB waste must be secured at the end of the day. Any dried and brittle PCB bulk product wastes requires additional care, such as the use of a HEPA-filtered vacuum operating while removing the material, to prevent the inadvertent release of PCB dust or powder into the environment.

6.2 PCB REMEDIATION WASTE

The primary PCB remediation waste generated by this abatement project will be PCB decontamination materials, porous and/or disposable tools and cleaning supplies, and personnel protective equipment used by workers during decontamination and removal activities. These materials will be placed directly into lined containers for disposal.

7.0 DISPOSAL

Disposal of all waste shall be in accordance with applicable state and federal regulations and sent to a licensed facility that will receive and retain PCB bulk product waste and PCB remediation waste, in accordance with EPA regulations under 40 CFR 761.61 and 40 CFR 761.62. All PCB bulk product waste and PCB remediation waste removed from the site will be kept separate from other ordinary construction waste streams that the contractor may generate. Copies of all bills of lading, waste shipment records, certificates of disposal, and any other documentation will be provided to Owner as proof of proper disposal of waste. No changes have been made to the PCB Disposal Plan previously approved.

PCB bulk product and PCB remediation wastes will be stored according to applicable EPA TSCA regulations. NASDI, LLC/YES shall ensure compliance with storage and marking requirements described in 40 CFR 761.40 and 40 CFR 761.65. NASDI, LLC/YES shall also ensure that no visible emissions of dust will occur during the disposal of PCB bulk product and PCB remediation wastes into appropriate disposal containers.

The PCB bulk product waste and PCB remediation waste will be disposed of in accordance with 40 CFR 761.62 and 40 CFR 761.61(b), respectively, at the approved landfill for such disposal. NASDI, LLC/YES shall submit the name of the landfill(s) with appropriate documentation to verify that it is capable of accepting PCB waste in accordance with these requirements, once a waste profile is generated by the landfill.

If PCB bulk product waste requires TCLP analysis prior to disposal, as required by the disposal facility, sampling and analysis will generally be conducted in compliance with Subpart R of the TSCA regulations, or at equivalent frequencies.



8.0 DECONTAMINATION PROCEDURES

NASDI, LLC/YES employees performing the PCB caulking removal, sorting, and disposal work will use two stage decontamination facilities located at the entrance to the regulated work areas to remove contaminated PPE and to wash any exposed skin areas prior to leaving the regulated areas. Water and towels used in personal decontamination will be collected and disposed of as PCB contaminated.

9.0 HEALTH AND SAFETY

9.1 NASDI, LLC/YES HEALTH AND SAFETY PLAN

The written Health and Safety plan details engineering controls, practices and procedures, protective equipment, and training that will be used to control and minimize exposures and has not been changed from what was previously submitted and approved.

9.2 OSHA REGULATIONS

All applicable federal and state OSHA standards and regulations to ensure worker safety will be in effect during the abatement process. The following programs are addressed in NASDI's Health and Safety plan. This is not a comprehensive list of the required programs, and NASDI, LLC/YES is responsible for determining which programs apply and how best to implement the required programs.

- Fall Protection
- Personal Protective Equipment
- Lockout/Tagout

-
- Confined Spaces
 - Machine Safety
 - Ladder/Scaffolding Safety
 - Electrical Safety
 - Housekeeping (Slips, Trips, Falls)
 - Injury Reporting
 - First Aid
 - HAZWOPER/HAZMAT

9.3 PUBLIC SAFETY

NASDI, LLC/YES will ensure public safety during the abatement work as identified within this plan. NASDI, LLC/YES will implement work area isolation measures designed to protect workers, occupants, and the environment from the release of PCB-containing materials. This includes the use of HEPA shrouded equipment to collect fugitive emissions during the dust generating operations and isolation of work areas from outside areas.

Access to work areas will need to be limited to ensure that only authorized workers aware of the abatement project will be within the Site. Proper hygiene and decontamination procedures must be followed to limit the potential for transferring PCB remediation waste outside the work area.

10.0 FINAL APPROVAL AND ACCEPTANCE

Final approval of the remedial work will be given when the following conditions are met:

- The work has been completed in a professionally competent manner, as demonstrated by successful visual inspections described in PCB Caulking Remediation Plan.



-
- The visual inspection will be followed by confirmatory sampling by URS Corporation consistent with the December 3, 2010 EPA approval of the Modification to the PCB Cleanup and Disposal Work Plan.
 - The Owner receives a completed and accurate waste manifest for every PCB waste container removed from the site's waste storage location.

The work will not be considered complete until Consigli & URS give final approval.



APPENDIX A

CERTIFICATION



NASDI

I, Chad Vincent NASDI, LLC have read and understood the Modification to the PCB Cleanup and Disposal Approval letter dated December 3, 2010 addressed to Mr. Donald Birch from the United States Environmental Protection Agency. By signing this acknowledgment form, I hereby agree to all conditions set forth in this document, including but not limited to EPA requests and attachments. I fully understand that I must comply with all requirements set forth in this Notification Letter.

Signature Chad Vincent NASDI, LLC

Printed Name Chad Vincent NASDI, LLC

Date: 1/12/11

NASDI

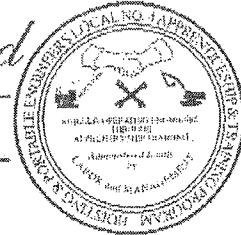
APPENDIX B
WORKER DOCUMENTATION



Prior To start of work, training certificates, medical forms and fit test shall be provided for workers that will be performing the identified work.

HOISTING and PORTABLE ENGINEERS Local 4*Apprenticeship Fund***ENGINEERS TRAINING CENTER**

John J. Gaffny, Jr., Coordinator



December 7, 2010

Mr. Chad Vincent
North American Site Developers
1365 Main Street
Waltham, MA 02451

Dear Mr. Vincent,

Mark St. Pierre of Amesbury Massachusetts attended a Hazmat Refresher class November 20, 2010. He is current and in compliance with his hazmat certification. Since all communications are sent to our National Hazmat office in West Virginia there is a time delay between when the journey members take the class and they receive their current sticker.

If you need further information, please do not hesitate to call my office at 781-821-0306.

Thank you for your understanding and cooperation.

Sincerely,

John J. Gaffny, Jr.
Coordinator

JJG/mmd

**INSTITUTE FOR ENVIRONMENTAL
EDUCATION, INC.**

16 Upton Drive Wilmington, MA 01887

PHONE (978) 658-5272

IEE

IEE

This is to certify that

Mark Berardi

has attended the 8-hour course

Hazardous Waste Operations Refresher Training

pursuant to OSHA 29 CFR Part 1910.120

October 22, 2010

Examination Date

10-5464-182-202182

Certificate Number

October 22, 2010

Course Dates

Course Location

Institute for Environmental Education, Inc.

16 Upton Drive

Wilmington, MA 01887

October 22, 2011

Expiration Date

Wentworth

Training Director

**INSTITUTE FOR ENVIRONMENTAL
EDUCATION, INC.**

16 Upton Drive Wilmington, MA 01887

PHONE (978) 658-5272

IEE

IEE

This is to certify that
Patrick McDonough

has attended the 8-hour course

Hazardous Waste Operations Refresher Training

pursuant to OSHA 29 CFR Part 1910.120

October 22, 2010

Examination Date

10-5464-182-234852

Certificate Number

October 22, 2010

Course Dates

Course Location

Institute for Environmental Education, Inc.

16 Upton Drive

Wilmington, MA 01887

October 22, 2011

Expiration Date

Wendy

Training Director

**INSTITUTE FOR ENVIRONMENTAL
EDUCATION, INC.**

16 Upton Drive Wilmington, MA 01887

PHONE (978) 658-5272

IEE

IEE

This is to certify that
Robert W Silvia

has attended the 8-hour course

Hazardous Waste Operations Refresher Training
pursuant to OSHA 29 CFR Part 1910.120

October 22, 2010
Examination Date

October 22, 2010
Course Dates

Course Location
Institute for Environmental Education, Inc.
16 Upton Drive
Wilmington, MA 01887

10-5464-182-227947
Certificate Number

October 22, 2011
Expiration Date

Wentworth

Training Director

APPENDIX C

**SIMPLE GREEN INFORMATIONIMPLE GREEN
INFORMATION**

Material Safety Data Sheet: **Simple Green® All-Purpose Cleaner**
Simple Green® Scrubbing Pad
Version No. 1300510B Date of Issue: February 2010

ANSI-Z400.1-2003 Format

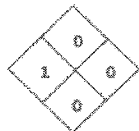
Section 1: PRODUCT & COMPANY IDENTIFICATION

Product Name: Simple Green® All-Purpose Cleaner
Simple Green® Scrubbing Pad
Additional Name: Simple Green® Concentrated Cleaner/Degreaser/Deodorizer
Manufacturer's Product Code Numbers: *Please refer to page 4
Company: Sunshine Makers, Inc.
15922 Pacific Coast Highway
Huntington Harbour, CA 92649 USA
Telephone: 800-228-0709 • 562-795-6000 **Fax:** 562-592-3830
Emergency Phone: Chem-Tel 24-Hour Emergency Service: 800-255-3924

Use of Product: An all purpose cleaner and degreaser used diluted in water for direct, spray and dip tank procedures. Scrubbing pad is used with water for manual scrubbing applications. Both are for cleaning water-safe surfaces.

Section 2: HAZARDS IDENTIFICATION

Emergency Overview: CAUTION. Mild eye irritant.
Simple Green® is a dark green liquid with a sassafras odor. Scrubbing Pad is a green fibrous rectangle.



HMIS Rating:
Health = 1 = slight
Fire = 0
Reactivity, and Special = 0 = minimal

Eye Contact: Mild Eye Irritant.
Skin Contact: No adverse effects expected under typical use conditions. Prolonged exposure may cause dryness. Under this condition, use of gloves or skin moisturizer after washing may be indicated.
Ingestion: May cause stomach or intestinal upset if swallowed (due to deterative properties.)
Inhalation: No adverse effects expected under typical use conditions. Adequate ventilation should be present when using Simple Green® over a prolonged period of time. Open windows or ventilate via fan or other air-moving equipment if necessary.
Carcinogens: No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.
Medical Conditions: No medical conditions are known to be aggravated by exposure to Simple Green®. Dermal-sensitive users may experience mild but reversible reactions.
UN Number: Not Required **Dangerous Goods Class:** Non-hazardous

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

The only ingredient of Simple Green® with established exposure limits is undiluted 2-butoxyethanol (<4%) (Butyl Cellosolve: CAS No. 111-76-2) [1% for Scrubbing Pad]; the ACGIH TLV-TWA is 20 ppm (97 mg/m³). Based upon chemical analysis, Simple Green® contains no known EPA priority pollutants, heavy metals or chemicals listed under RCRA, CERCLA, or CWA. Analysis by TCLP (Toxicity Characteristic Leaching Procedure) according to RCRA revealed no toxic organic or inorganic constituents.

All components of Simple Green® are listed on the TSCA Chemical Substance Inventory.
This product does not contain any ingredients covered by the provisions of 29 CFR 1910.1200.

Material Safety Data Sheet: **Simple Green® All-Purpose Cleaner**
Simple Green® Scrubbing Pad
Version No. 1300510B Date of Issue: February 2010

ANSI-Z400.1-2003 Format

Section 4: FIRST AID MEASURES

Eye Contact: Reddening may develop. Immediately rinse the eye with large quantities of cool water; continue 10-15 minutes or until the material has been removed; be sure to remove contact lenses, if present, and to lift upper and lower lids during rinsing. Get medical attention if irritation persists.

Skin Contact: Minimal effects, if any; rinse skin with water, rinse shoes and launder clothing before reuse. Reversible reddening may occur in some dermal-sensitive users; thoroughly rinse area and get medical attention if reaction persists.

Swallowing: Essentially non-toxic. Give several glasses of water to dilute; do not induce vomiting. If stomach upset occurs, consult physician.

Inhalation: Non-toxic. Exposure to concentrate may cause mild irritation of nasal passages or throat; remove to fresh air. Get medical attention if irritation persists.

Section 5: FIRE FIGHTING MEASURES

Simple Green® is stable, not flammable, and will not burn. No special procedures required.

Flash Point/Auto-Ignition: Not flammable. Extinguishing Media: Not flammable/non-explosive.
Flammability Limits: Not flammable. Special Fire Fighting Procedures: None required.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes. Do not rub eyes with hands during cleanup. No special precautions for dermal contact are needed. Wash hands thoroughly after cleaning up spill or leak.

Method for cleaning up: Recover usable material by convenient method, residual may be removed by wipe or wet mop. If necessary, unrecoverable material may be washed to drain with large quantities of water.

Section 7: HANDLING AND STORAGE

No Special precautions are required. This product is non-hazardous for storage and transport according to the U.S. Department of Transportation Regulations. Simple Green® requires no special labeling or placarding to meet U.S. Department of Transportation requirements.

UN Number: Not Required Dangerous Goods Class: Non-hazardous

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: The Simple Green® formulation presents no health hazards to the user when used according to label directions for its intended purposes. Mild skin and eye irritation is possible (please see Eye contact and Skin contact in section IV.) No special precautionary measures required under normal use conditions.

Ventilation: No special ventilation, precautions or respiratory protection is required during normal use. Large-scale use indoors should provide an increased rate of air exchange.

Human Health Effects or Risks From Exposure: Adverse effects on human health are not expected from Simple Green®, based on 20 years of use of Simple Green® without reported adverse health incidence in diverse population groups, including extensive use by inmates of U.S. Federal prisons in cleaning operations.

Eye protection: Simple Green® is a mild eye irritant; mucous membranes may become irritated by concentrate. Eye protection not generally required. Wash hands after using wipes.

Skin protection: Simple Green® is not likely to irritate the skin in the majority of users. Repeated daily application to the skin without rinsing, or continuous contact on the skin may lead to temporary, but reversible, irritation. Rinse completely from skin after contact.

Section 8: EXPOSURE CONTROLS PERSONAL PROTECTION – continued –

General hygiene conditions: There are no known hazards associated with this material when used as recommended. The following general hygiene considerations are recognized as common good industrial hygiene practices:

- Avoid breathing vapor or mist.
- Avoid contact with eyes.
- Wash thoroughly after handling and before eating, drinking, or smoking.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Cleaner is a dark green liquid, pad is a fibrous green matrix; both exhibit a sassafras odor.			
Specific Gravity:	1.010 ± 0.010	Vapor Pressure:	18 mm Hg @ 20°C; 23.5 mmHg @ 26°C
Evaporation:	>1 (butyl acetate = 1)	Vapor Density:	1.3 (air = 1)
Water Solubility:	100%	Density:	8.5 lbs/gallon
Boiling Point:	100.6°C (212°F)	pH:	9.5 ± 0.3
Ash Content:	At 600°F: 1.86% by weight	Nutrient Content:	
Freezing Point:	Approx -9 °C (16 °F) <i>If product freezes, it will reconstitute without loss of efficacy when brought back to room temperature and agitated.</i>	Phosphorus: 0.3% by formula Nitrogen <1.0% by weight (fusion and qualitative test for ammonia) Sulfur: 0.6% by weight (barium chloride precipitation method)	
VOC Composite Partial Pressure: 0.006 mmHg @ 20°C			
Volatile Organic Compounds (VOCs):		Cleaner meets CARB & BAAQMD regulations. Cleaner must be diluted 1:1 with water to Meet SCAQMD Rule 1171 & Rule 1122 VOC requirements for solvent cleaning operations. [Scrubber VOCs = 3.3% prior to dilution w/water]	
CARB Method 310	3.8%		
SCAQMD Method 313	2.8%		

Section 10: STABILITY AND REACTIVITY

Stability: Stable
Materials to Avoid: None known
Hazardous Decomposition Products: None expected

Section 11: TOXICOLOGICAL INFORMATION

Toxicology information is based on chemical profile of ingredients and extrapolation of data from similar formulas.

Acute Toxicity: Oral LD₅₀ (rat) >5 g/kg body weight*
Dermal LD₅₀ (rabbit) >2 g/kg body weight
*Calculation from OECD series on testing and assessment number 33, Chapter 3.2

Eye Irritation: Moderate/Mild reversible eye irritation may occur based on relevant laboratory studies. This potential is reduced by immediate rinsing of eyes in case of eye contact.

Dermal Irritation: Mild, reversible skin irritation may occur based on relevant laboratory studies. A 6-hour exposure to human skin under a patch did not produce irritation

Repeat Exposure Via Skin Contact: Based on relevant laboratory studies, no toxic effects are expected to be associated with daily skin exposures (with up to 2 g/kg/day tested for 13 weeks on rabbits). Skin irritation may, however, occur with repeated or prolonged exposures.

Reproductive Effects Assessment: Based on relevant laboratory studies (CD-1 mouse 18-week fertility assessment continuous breeding), no adverse effects on reproduction, fertility, or health of offspring are expected.

Section 12: ECOLOGICAL INFORMATION

Hazard to wild animals & aquatic organisms: Low, based on toxicological profile.
Biodegradability: Readily biodegradable based on biodegradation profile.
PRO/FT CBT-AC 014-7 "Ready Biodegradability: Closed Bottle Test" OECD, and OECD 302B laboratory tests
Environmental Toxicity Information: It is important not to allow the runoff from cleaning into closed systems such as decorative ponds. Always protect closed systems with tarps or dikes if necessary.

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal laws. Dispose of used or unused product, and empty containers in accordance with the local, State, Provincial, and Federal regulations for your location. Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains.

Section 14: TRANSPORT INFORMATION

This product is non-hazardous for transport according to the U.S. Department of Transportation Services
UN Number: Not required Dangerous Goods Class: Non-hazardous

Section 15: REGULATORY INFORMATION

*Reportable components:

All components are listed on: EINECS and TSCA Inventory

No components listed under: Clean Air Act Section 112

TSCA /TRI SARA Title III Reporting: This product contains 2-butoxyethanol (111-76-2, <4%) which is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 as Category N230 - Certain Glycol Ethers.

RCRA Status: Not a hazardous waste.

CERCLA Status: No components listed

CA PROP. 65 Status: No components listed

Section 16: OTHER INFORMATION

PREPARER:

Questions about the information found on this MSDS should be directed to:

SUNSHINE MAKERS, INC. - TECHNICAL DEPARTMENT

15922 Pacific Coast Hwy. Huntington Harbour, CA 92649

Phone: 800/228-0709 [8am-5pm Pacific time, Mon-Fri]

Fax: 562/592-3830

Email:
infoweb@simplegreen.com

CAGE CODE 1Z575

GSA/FSS - CONTRACT NO. GS-07F-0065J

Scrubbing Pad GSA/BPA - CONTRACT NO. GS-07F-BSEMF

National Stock Numbers & Industrial Part Numbers:

Simple Green

Part Number	NSN	Size
13012	7930-01-342-5315	24 oz spray (12/case)
13003	7930-01-306-8369	1 Gallon (6/case)
13006	7930-01-342-5316	5 Gallon
13016	7930-01-342-5317	15 Gallon
13008	7930-01-342-4145	55 Gallon
13275	N/A	275 Gallon tote
10224	7930-01-346-9148	Each (24/case)

Scrubbing Pad

Retail Numbers:

Part Number	Size
13002	16 oz Trigger (12/case)
13005	1 Gallon (6 case)
13013	24 oz Trigger (12/case)
13014	67 oz / 2 L (6/case)
13033	32 oz Trigger (12/case)

part number is for both industrial and retail

**International Part Numbers May Differ.

DISCLAIMER: The information provided with this MSDS is furnished in good faith and without warranty of any kind. Personnel handling this material must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of this material and the safety and health of employees and customers. Sunshine Makers, Inc. assumes no additional liability or responsibility resulting from the use of, or reliance on this information.



APPENDIX D

PCB CAULKING CONTAINMENT LAYOUT

PCB SAMPLE LOCATIONS
AUGUST 2010

● WCP - 油漆样 CAULK SAMPLE LOCATION
○ WCP - 油漆样 WHERE ADJACENT CONCRETE SAMPLES WERE COLLECTED
▲ WCCP - 油漆样 PAINT CHIP SAMPLE LOCATION

Exterior Contaminant #1
Exterior Contaminant #2
Exterior Contaminant #3

WCP-029
WCP-028
WCP-027
WCP-026
WCP-025
WCP-024
WCP-023
WCP-022
WCP-021
WCP-020
WCP-019
WCP-018
WCP-017
WCP-016
WCP-015
WCP-014
WCP-013
WCP-012
WCP-011
WCP-010
WCP-009
WCP-008
WCP-007
WCP-006
WCP-005
WCP-004
WCP-003
WCP-002
WCP-001

WCCP-001
WCCP-002
WCCP-003
WCCP-004
WCCP-005
WCCP-006
WCCP-007
WCCP-008
WCCP-009
WCCP-010
WCCP-011
WCCP-012
WCCP-013
WCCP-014
WCCP-015
WCCP-016
WCCP-017
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WCCP-027
WCCP-028
WCCP-029

URS

CITY SQUARE DEVELOPMENT CO., LLC
CITY SQUARE WORCESTER COMMONS
FRONT STREET
WORCESTER, MASSACHUSETTS
CAULK, CONCRETE AND PAINT
SAMPLE LOCATIONS

2 OF 6

FOR SAMPLE LOCATIONS
AUGUST 2018

- WCP-1-#108 CANUL SAMPLE LOCATION
○ WCP-1-#109 TANKIN SAMPLE LOCATION
▲ WCP-1-#110 WHERE ADJACENT CONCRETE SAMPLES WERE COLLECTED
▲ WCP-1-#111 PAINT CHIP SAMPLE LOCATION

[illegible]

Exterior Containment

Exterior Containment #3

CITY SQUARE DEVELOPMENT CO., LLC

CHESBROUGH DEVELOPMENT CO., LLC

CITY SQUARE WORCESTER COMMONS
FROM 1001 STREET

WOLFE MEADOWS
HOLY STREET

FOR THE MONTH OF

CALL CENTER ALL-STAR SALES: 100 TOP SALES TECHNIQUES

2 3.24.33

TRIP

2000

姓名	性别	年龄	职业
张德胜	男	45	教师
李秀英	女	38	护士
王小明	男	22	学生
赵小红	女	28	职员

[illegible][illegible]